

RUNERGY

HY-DH108N8B

420-450W

23.0%

Max. Efficiency

N-Type

Bifacial & Dual Glass

108 Pieces

Half-Cell



High Conversion Efficiency

Module efficiency up to 22.5% based on N-Type wafer and advanced N-Type cell technology



Excellent Energy Yield

More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality



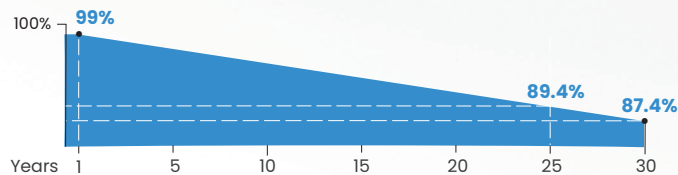
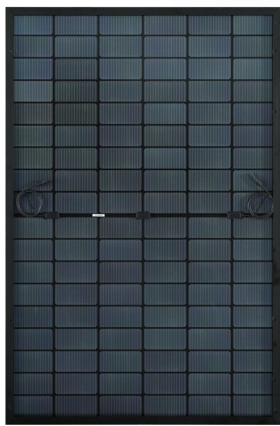
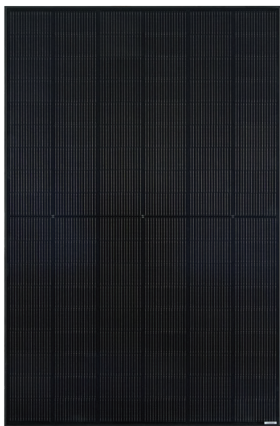
Outstanding Anti-degradation

Unsusceptible to LID, LeTID and less annual degradation due to special characteristics of N-Type



Quality Guarantee

High module quality ensures long-term reliability



Runergy N-Type Dual Glass Product Performance Warranty

• 1st year degradation <1%, annual degradation <0.4%



25-year product warranty



30-year linear power warranty

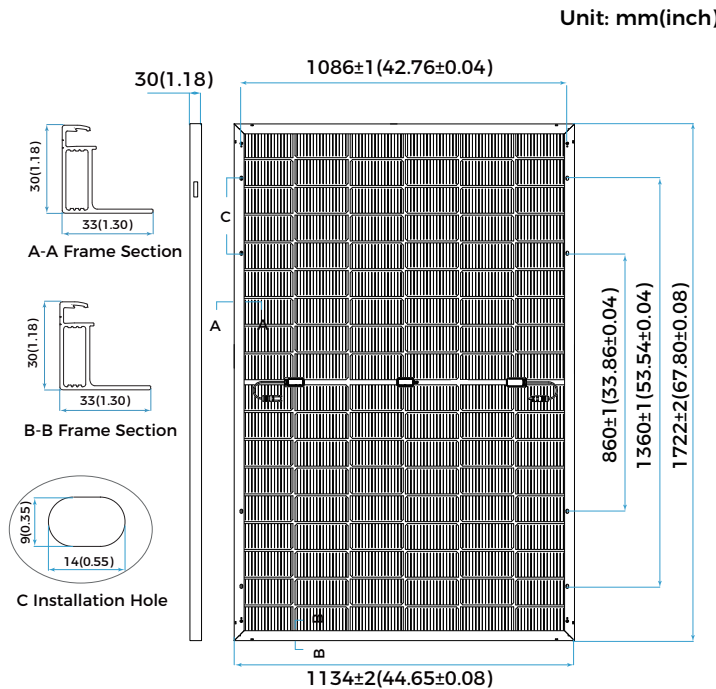
IEC61215 / IEC61730 / UL61730 / IEC61701 / IEC62716 / IEC60068 / ISO9001 / ISO14001 / ISO45001



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Mechanical Parameters	
Solar Cell	Mono N-Type 182mm
No. of Cells	108 (6 × 18)
Dimensions	1722 × 1134 × 30mm(67.80 x 44.65 x 1.18in)
Weight	24.2kg(53.35lbs)
Junction Box	IP68 rated (3 bypass diodes)
Output Cable	4mm ² (IEC), 12 AWG(UL) ±1200mm(47.24in.) or customized
Connector	EVO2 or similar
Front Cover	2.0mm AR coated heat strengthened glass
Back Cover	2.0mm heat strengthened glass
Frame	Black/Silver anodized aluminum
Container	36 pcs/Pallet, 756pcs/40' HQ

Operating Parameters	
Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40℃ ~ +85℃(-40℉ ~ +185℉)
Max. Fuse Rating	30A
Frontside Max. Loading	5400Pa(112lb/ft ²)
Backside Max. Loading	3600Pa(75lb/ft ²)
Bifaciality	80%±5%
Fire Resistance	IEC Class A/ UL type 29



Electrical Characteristics - STC	Irradiance 1000 W/m ² , cell temperature 25 °C, AM1.5, Test uncertainty for Pmax: ±3%						
Maximum Power at STC (Pmax/W)	450	445	440	435	430	425	420
Power Tolerance (W)	0 ~ +5						
Optimum Operating Voltage (Vmp/V)	33.22	33.39	33.21	33.03	32.85	32.67	32.49
Optimum Operating Current (Imp/A)	13.55	13.33	13.25	13.17	13.09	13.01	12.93
Open Circuit Voltage (Voc/V)	39.79	39.96	39.16	38.97	38.78	38.59	38.40
Short Circuit Current (Isc/A)	14.00	13.96	13.88	13.80	13.72	13.64	13.56
Module Efficiency	23.0%	22.8%	22.5%	22.3%	22.0%	21.8%	21.5%

Electrical Characteristics - BNPI	Irradiance: front 1000W/m ² , rear 135W/m ² , Cell temperature 20 °C, AM-1.5.						
Maximum Power at NMOT (Pmax/W)	501	490	484	479	473	468	462
Optimum Operating Voltage (Vmp/V)	33.22	33.39	33.21	33.03	32.85	32.67	32.49
Optimum Operating Current (Imp/A)	14.91	14.67	14.58	14.49	14.41	14.32	14.23
Open Circuit Voltage (Voc/V)	39.89	39.45	39.26	39.07	38.88	38.68	38.49
Short Circuit Current (Isc/A)	15.43	15.39	15.30	15.21	15.12	15.04	14.95

Rearside Power Gain (Reference to 440W Front)			
Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	462	506	550
Optimum Operating Voltage (Vmp/V)	33.21	33.31	33.31
Optimum Operating Current (Imp/A)	13.91	15.19	16.51
Open Circuit Voltage (Voc/V)	39.16	39.26	39.26
Short Circuit Current (Isc/A)	14.57	15.92	17.30
Module Efficiency	23.7%	25.9%	28.1%

Temperature Characteristics	
Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.045%/°C

